

ABSTRACT OF THE DISCLOSURE

A cooking system based on the principle of heat conduction and having a one-piece cooking surface made of a glass-ceramic material. The cooking surface has a cooking area which can be directly heated in an individual manner by heating elements placed on the underside of the glass-ceramic plate. The glass-ceramic plate has main crystal phases, high quartz mixed crystal or keatite mixed crystal, primarily formed from constituents LiO_2 - Al_2O_3 - SiO_2 , with a coefficient of expansion of $\alpha = 0$ to $1.5 \times 10^{-6}/\text{K}$, preferably $\alpha = 0$ to $1 \times 10^{-6}/\text{K}$, and with a thermal conductivity of $< 3 \text{ W/mK}$, preferably of $< 2.7 \text{ W/m K}$. The glass-ceramic plate also has at least one cooking area situated on an underside of the plate. In addition, the heating elements of the cooking areas are of metallic layers, and a porous ceramic layer is placed between the underside of the glass-ceramic plate and the heating elements while serving as an electrical insulation layer. The optical appearance and the cleanability of the cooking system are thus improved, and it is possible to directly apply a durable heating layer system while considerably increasing the cooking capacities.